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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,002	11/30/2001	Michael Neal	DEM1P009	9261

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EXAMINER	
RUHL, DENNIS WILLIAM	
ART UNIT	**PAPER NUMBER**
3629	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,002	NEAL ET AL.	
	Examiner	Art Unit	
	Dennis Ruhl	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8,9,10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The response of 5-27-03 has been entered and considered. Currently claims 1-24 are pending. The instant examiner has considered the arguments made by applicant in the most recent response and has reviewed the entire prosecution history to date; however a new grounds of rejection is presented in this office action so those arguments are considered moot.

With respect to an IDS submitted on 10/7/02, the examiner has attempted to locate copies of the non-patent literature that was cited in the IDS; however, the copies have not been located. The file copy of the application does not contain the references and the examiner does not know where they are. The instant examiner did not have the opportunity to review the non-patent literature references and because of this, the instant examiner requests that applicant please provide additional copies for review. This would greatly assist the examiner in the prosecution and expeditious handling of this application. The instant examiner feels that it is very important to be able to review these references prior to any final disposition of this application to make sure the final work product is of high quality. Applicant is thanked in advance for their cooperation in this matter.

The examiner notes the comments concerning the Oath made by the prior examiner and applicant in the most recent response. The Oath does contain a 35 USC 120 priority claim (which is technically improper because of the filing dates involved) but applicant has stated that no priority is being claimed and the examiner is confirming this. The filing date of this application is 11/30/01 and no priority to another application (foreign or domestic) is being claimed by applicant or granted. The Oath is proper and

the examiner sees no reason why a new Oath (with no 120 priority claim) needs to be submitted.

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 14-21 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

1. Whether the invention is within the technological arts; and
2. Whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere idea in the abstract (i.e. abstract ideas, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e. physical sciences as opposed to social sciences for example), and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, use or advance the technological arts.

For claims 14-21, the claims do not require or recite the use of any technology at all. The recited steps could all be done mentally in a person's brain or on paper. Technology is required to be considered statutory subject matter. The claims only recite

an abstract idea. The recited steps do not apply, involve, use, or advance the technological arts since all of the recited steps can be done with no technology at all.

3. Claims 22,23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For claim 22, the examiner has concluded that the claim is directed to non-statutory subject matter because a "signal" is not considered statutory. A signal (in a carrier wave) is not a tangible thing. A signal is not something that is eligible for patent rights.

For claim 23, the claim is directed to a database and is claimed by using a product by process type of claim construction. The examiner is not clear as to what the resulting structure of the database is (to be addressed under 35 USC 112,2) but it is apparent that no technology is required in the method steps and the steps could all be done mentally. This then means that the resulting structure of the "database" could be a group of numbers one has in their memory (their brain). Claim 23 is not considered statutory because the examiner does not feel that the resulting structure of the method is a tangible thing (in the example of the mental processing of the steps). It is also possible that the resulting structure could be a bunch of numbers on paper, which is not eligible for patent protection because it is simply printed matter (paper with numbers on the paper). The scope of claim 23 is not directed to statutory subject matter.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 3,16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has recited that the computer code selects products that provide the "greatest optimization" for any set of products. How can the computer code know what the result of the optimization will be prior to actually running the numbers? One of skill in the art would have no way to know how to give the computer code the ability to "see into the future" and predict what products will have the greatest optimization before the optimization has even been done? Undue experimentation would necessarily be involved and one of skill in the art would not be able to make and/or use the invention was claimed. Also lending to the non-enablement of the claim is the fact that it is not known what is meant by "greatest optimization" (see 112,2) If you don't know what that term means, you cannot make the invention. Claims 3,16 are not enabled to one skilled in the art.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-8,12,13,16,19,22,23, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 3,16, what is the scope of "greatest optimization"? What does it mean to have the greatest optimization? To optimize a price means you figure out a price based on certain criteria of importance, so how can one optimization be greater than another? The resulting change in price may change but that is not what has been claimed. It is not clear what these claims are claiming.

For claims 6,12,19, what is "bound data"? What does this refer to and what is the scope of this term? Data is data, what you call it may or may not mean anything and in this case it is not clear to the examiner what this means and what the scope of this term is.

For claim 22, it is totally unclear what is being claimed here. Is applicant just claiming a data signal (in a carrier wave) or is the claim directed to a method as the body of the claim recites? The signal represents instructions, but what is the signal? The fact that it represents instructions that do A, B, and C, defines nothing about the signal. Maybe this is supposed to be a method claim? The scope of this claim is not clear.

For claim 23, this claim is a product by process claim where the structure of the article (the database) is defined by the end structure that the recited method results in. In the instant case, it is not clear to the examiner what that end structure will be. No technology is required in the method steps and the steps could all be done mentally. This then means that the resulting structure of the "database" could be a group of numbers one has in their memory (their brain). Does this mean that the claimed

database could be a person's brain? What is the end structure that the product by process limitations result in?

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Reuhl et al. (5873069).

For claims 1,14,21,24, Reuhl discloses a method and system where sales and price data is entered into a computer system and the system then "optimizes" the prices of numerous products based on the inputted sales data. The software has criteria (a rule) for figuring out the pricing of the products. The storage medium of claim 1 is disclosed in column 3, lines 29-32. The steps of storing initial prices are satisfied because at some point you must input some kind of price into the system. This is inherent. Reuhl discloses code for designating a subset of products to optimize prices for. This is because the computer system (software) only optimizes prices for products that have had new sales data entered into the system. So if sales data for televisions is updated in the system, the prices for batteries will not be changed. The examiner encourages applicant to read the entire patent to Reuhl, but also points applicant to the following sections of particular relevance to the claimed invention. See column 6, lines

29-44; col. 7, lines 23-39; col. 8, lines 12-27; col. 10, lines 28-32; col. 11, lines 26 to column 12, line 52.

For claims 2,15, the "N" products is the number of products that the new sales data relates to. N can be the number of televisions that prices are being optimized for.

For claims 3,6,11,16,19, due to the 112,2nd paragraph problems noted by the examiner, as the claims are best understood by the examiner, Reuhl discloses the claimed invention.

For claims 4,9,17, with respect to "initial prices", one you run an optimization routine, the very last price prior to the optimization is the "initial price". Reuhl discloses what is claimed.

For claims 5,10,18, the examiner considers it inherent that the system of Reuhl has "code for providing new data". This can be interpreted to be the software drivers that are used in computers to allow data transfer. This could be a modem driver, a keyboard driver, etc.. Anything that allows or assists in the taking in or transmitting or processing of data reads on what is claimed.

For claims 7,12,20, the claimed rule relaxation is satisfied by the fact that Reuhl discloses that a "family discount" may be entered into the system. This allows one to violate the pricing rule of the "lowest price" and set the price even lower because of the family discount.

For claims 8,13, the code for allowing one to prioritize rules and code for relaxing at least one rule is satisfied by the fact that one can override the price of an item (i.e. family discount). The PRICE CHANGE option allows one to do what is claimed. The

language "for allowing...." and "for relaxing" is functional language that is satisfied by Reuhl.

For claim 22, as the scope of the claim is best understood by the examiner Reuhl anticipates the claim. Reuhl does all that is claimed as far as method steps go so the claimed "signal" also must be present in Reuhl.

For claim 23, see column 7, lines 22-39 where a database is disclosed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 703-308-2262. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703-308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DENNIS RUHL
PRIMARY EXAMINER